

CLAIMS

1. Within a communication system providing communication services on a communication channel, a
5 method of correcting information communicated on the communication channel comprising the steps of:

receiving on the communication channel a plurality of data frames, wherein the plurality of data frames include at least one of valid data
10 frames, erasure data frames and invalid data frames and wherein each valid data frame comprises an associated data frame sequence identifier;

sequencing the plurality of data frames according to the data frame sequence identifiers to
15 form a data frame sequence;

identifying within the data frame sequence an omitted data frame;

inserting within the data frame sequence a place holder frame for the omitted data frame;

20 determining a valid frame sequence parameter; validating the data frame sequence using the valid frame sequence parameter.

2. The method of claim 1, further comprising the
25 step of modifying the data frame sequence responsive to the data frame sequence parameter.

3. The method of claim 1, further comprising the
step of characterizing received valid data frames as
30 invalid data frames responsive to the data frame sequence parameter.

4. The method of claim 1, further comprising,
before the step of validating the data frame
sequence, the step of receiving a next data frame
5 sequence.

5. A method of providing RLP data checking
comprising:

10 receiving a plurality of RLP data frames;
sequencing the plurality of RLP data frames
according to data frame sequence identifiers to form
a data frame sequence;
identifying within the data frame sequence an
omitted data frame;
15 inserting within the data frame sequence a
place holder frame for the omitted data frame;
determining a valid frame sequence parameter;
validating the data frame sequence using the
valid frame sequence parameter.
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6. The method of claim 5, further comprising the
step of modifying the data frame sequence responsive
to the data frame sequence parameter.

25 7. The method of claim 5, further comprising the
step of characterizing received valid data frames as
invalid data frames responsive to the data frame
sequence parameter.

8. The method of claim 5, further comprising, before the step of validating the data frame sequence, the step of receiving a next data frame sequence.

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9. A method of providing RLP data checking comprising:

receiving a plurality of RLP data frames;

identifying from the RLP data frames a suspect frame, reclassifying the suspect frame to form a reclassified frame, and

passing the reclassified frame to a RLP data detector.

15 10. The method of claim 9, wherein the step of reclassifying the suspect frame comprises reclassifying the bad frame as an erasure.

20 11. The method of claim 10, wherein the step of reclassifying the suspect frame comprises inserting a place holder frame.

25 12. The method of claim 10, wherein the step of reclassifying the suspect frame comprises characterizing received a valid data frame as an invalid data frame responsive to a data frame sequence parameter.

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13. The method of claim 10, further comprising the step of sequencing the plurality of RLP data frames according to data frame sequence identifiers to form a data frame sequence.

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14. The method of claim 13, further comprising the step of modifying the data frame sequence responsive to a data frame sequence parameter.

10 15. The method of claim 10, further comprising the step of validating the data frame sequence.

15 16. The method of claim 15, further comprising, before the validating the data frame sequence, the step of receiving a next data frame sequence.

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17. An apparatus for RLP data checking comprising:
a frame serialization stage, the frame
serialization stage coupled to receive a plurality
of RLP data frames, each of the plurality of RLP
5 data frames having a sequence number and the frame
serialization stage being operable to provide a
sequenced data frame output;

10 a frame filter coupled to the frame
serialization stage to receive the sequenced data
frame output and to provide a filtered data frame
output; and

15 wherein, place holder frames are inserted in
the sequenced data frame output for suspected
omitted frames, and erasure frames are inserted in
the filtered data frame output for suspected bad
data frames.

18. The apparatus of claim 17, wherein the frame
serialization stage is coupled to receive a next
20 expected sequence number.

19. The apparatus of claim 17, wherein the frame
serialization stage is coupled to an output of a
frame CRC check stage and the frame filter is
25 coupled to an input of an RLP data layer.